

# A NEW SPECIES OF *POMADERIS* Labill. (RHAMNACEAE) FROM NORTH-EAST VICTORIA.

by

N.G. WALSH\*

## ABSTRACT

Walsh, N.G. A new species of *Pomaderris* Labill. (Rhamnaceae) from north-east Victoria. *Muelleria* 7(4): 447–449 (1992). — *Pomaderris subplicata* is described as a new species. Its relationships with other species are discussed and its ecology and conservation status outlined. An illustration is provided.

## INTRODUCTION

Several articles by the present author, dealing with taxonomy of *Pomaderris* in south-eastern Australia have been published in *Muelleria* since 1988. The other articles appeared in volumes 6(6), 7(1) and 7(2) (1988, 1989 and 1990 respectively).

## TAXONOMY

*Pomaderris subplicata* N.G. Walsh *sp. nov.*

*Pomaderris vacciniifoliae* Reiss. affinis, foliis canaliculatis, velutinis pagina supera, ovariis et pagina infera pilis simplicibus et stellatis mixtis differt; *Pomaderris elachophyllae* F. Muell. et *Pomaderris racemosae* Hook. similis sed petalis praesentibus distinguitur praeter.

TYPUS: Victoria, north-east, Carboor Upper, beside Hurdle Ck, alt c. 320 m a.s.l., 4.x.1990, N.G. Walsh 2906 (HOLOTYPE: MEL 1590325; ISOTYPI BRI, CBG, HO, NSW).

Erect, often multistemmed shrub to c. 2 m high. *Petioles* and young branches closely stellate-tomentose with sparsely scattered, longer, simple hairs. *Leaf lamina* ovate, elliptic or obovate, 3–10 × 2–6 mm, obtuse, slightly concave to almost conduplicate; lateral venation indistinct; upper surface velutinous with fine stellate hairs; lower surface appearing whitish from the close stellate tomentum, but with occasional longer (to c. 1 mm) coppery, simple, or less commonly, stellate hairs, mostly overlying the veins. *Stipules* subulate, mostly 1–2 mm long, not retained beyond the current seasons growth. *Inflorescence* of small axillary clusters or racemes, crowded, confined to the terminal 1–2 cm of the branchlets. *Pedicels* 1–2.5 mm long. *Sepals* ovate-triangular, spreading, c. 1.5 mm long, densely covered externally with pale, fine stellate hairs, with or without a few longer simple hairs, glabrous and pale yellow on inner surface. *Petals* pale yellow, narrowly obovate, sometimes irregularly toothed, 0.5–1 × 0.3–0.5 mm, falling at or very soon after anthesis, shortly fused with the base of the staminal filaments. *Staminal filaments* 1.5–2 mm long; anthers c. 0.7 mm long. *Ovary* semi-inferior, conically exserted, somewhat angular, covered with a mixture of minute stellate and longer simple hairs; style branches cleft to base, c. 0.5 mm long, stigmas capitate. *Capsule* ovoid, pointed, c. 3 mm long; cocci opening via a membrane which covers most of the inner face. *Seed* oval in outline, plano-convex, c. 2 × 1 mm.

## OTHER SPECIMENS EXAMINED:

Victoria — from type locality — 22.i.1988, A.C. Beaglehole 92872, with N.A.F. Gibb & R.V. Leeton (MEL 117483); 13.i.1990, J. Strudwick 780, with N.A.F. Gibb (MEL 1579917).

---

\* National Herbarium of Victoria, Birdwood Avenue, South Yarra, Victoria Australia 3141.

## DISTRIBUTION AND CONSERVATION STATUS:

*Pomaderris subplicata* is known only from the type population of c. 150 plants in an area of c. 0.25 ha. The population occurs on crown land adjacent to a *Pinus radiata* plantation. The area is not a gazetted biological reserve, but measures have been taken by the local managing authority (Department of Conservation & Environment, Victoria, North-east region) to protect the site and to control a

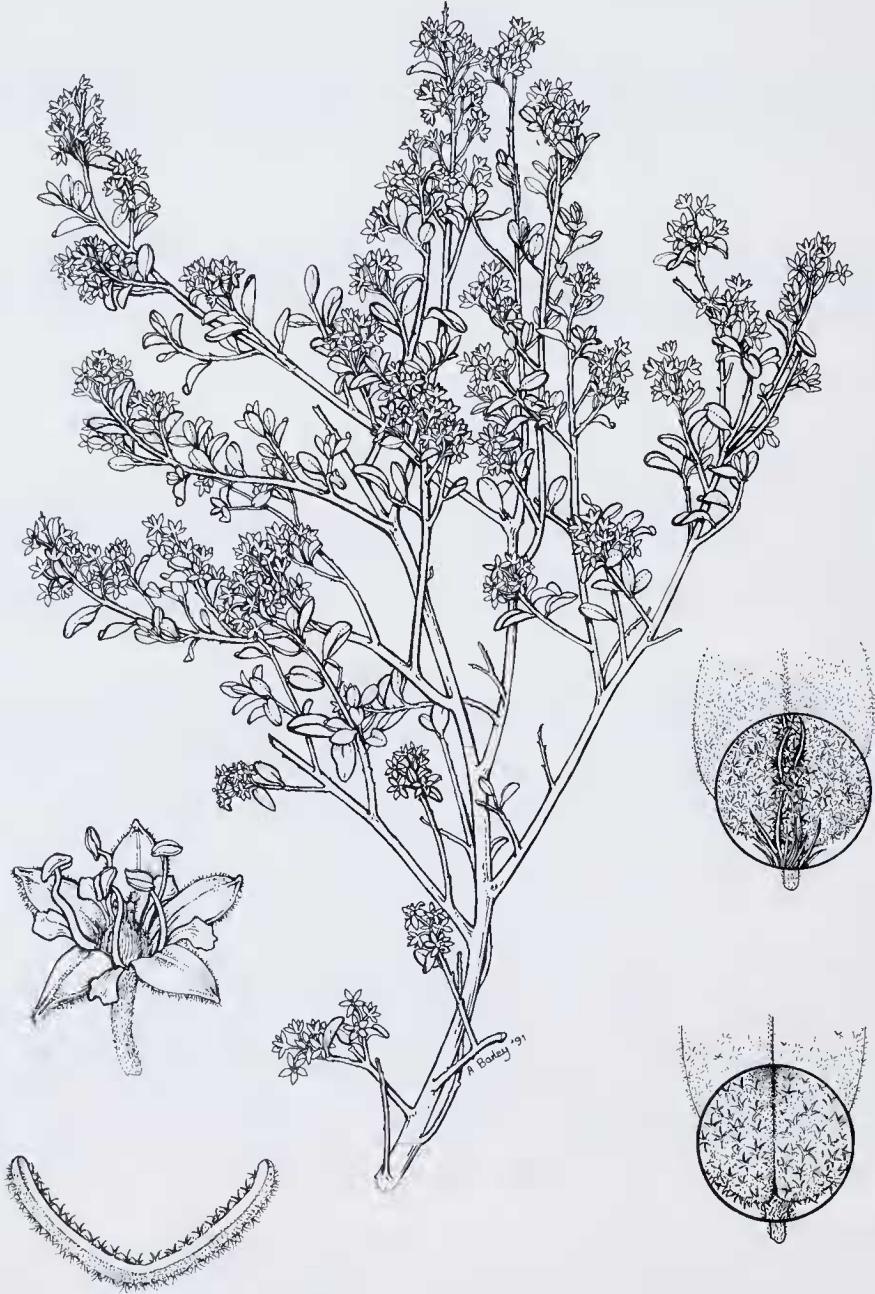


Fig. 1. *Pomaderris subplicata*. a — flowering branch,  $\times 1$ . b — flower,  $\times 6$ . c — leaf t.s.  $\times 12$ . d — leaf lower surface, enlarged section,  $\times 9$ . e — leaf upper surface, enlarged section,  $\times 9$ . a-e from the type collection.

dense infestation of blackberry (*Rubus procerus*) which impinges on part of the population and has covered adjacent potential habitat. The small population of *Pomaderris subplicata* and its proximity to an area destined to experience disturbance (for *Pinus radiata* management and removal of logs) suggests the species be regarded as vulnerable, with Risk Code 2vi (Briggs and Leigh, 1989).

#### HABITAT:

*Pomaderris subplicata* grows on a steep, rocky, south to south-west facing slope about 50 m from a small permanent creek. The soil is shallow and derived from Ordovician sediments. Annual rainfall is c. 1000 mm (Duncan, 1982). The population forms a dense shrubland with scattered *Eucalyptus goniocalyx*, *E. macrorhyncha* and *Acacia dealbata*. A dense bracken fern (*Pteridium esculentum*) layer occurs to the east and downslope on deeper soils.

#### NOTES:

In the prominently raised ovary, small leaves and general indumentum *P. subplicata* is allied to *P. elachophylla*, *P. racemosa* and *P. vacciniifolia*, but is readily distinguished from these by the velutinous upper surfaces of the leaves and by the presence of some simple hairs intermixed with the dense stellate tomentum of the young branches, abaxial leaf surfaces and the sepals. *Pomaderris subplicata* is further distinguished from *P. elachophylla* and *P. racemosa* in having petals, and from *P. vacciniifolia* by the petals being much smaller than the stamens and falling at or immediately following anthesis. *Pomaderris pallida*, a species of restricted distribution in southern New South Wales and A.C.T., closely resembles *P. subplicata* in the type and disposition of the indumentum, but is apetalous, has larger leaves and lacks a prominently raised ovary. *Pomaderris subplicata* was recorded by Beaglehole (1988) as *P. pauciflora*, an uncommon species of far eastern Victoria and south-eastern New South Wales. *Pomaderris pauciflora* is readily distinguished by its apetalous flowers and the oblong or narrowly obovate leaves which have recurved margins and hispid upper surfaces.

The specific epithet refers to the leaves which remain infolded to varying degrees in their adult state. This feature appears to be unique within the genus although immature leaves of all species are conduplicate. Although normally the prefix *sub* would be assimilated (to *supplicata*), it is deliberately maintained here to avoid confusion with the verb 'supplicate' (to entreat or pray) in its common English usage.

#### ACKNOWLEDGEMENTS

I am very grateful to Julie Strudwick of Upper Lurg and Russel Leeton of Carboor Upper for collecting material of *P. subplicata* on my behalf, to Alan Gibb of Bobbinawarrah for his hospitality and information regarding the plants. Glen Johnson (Department of Conservation & Environment, Wodonga) is to be commended for promptly responding to requests that measures to be taken to ensure the well-being of the only known population of *P. subplicata*, and I also thank my colleague, Anita Barley for preparing the accompanying illustration.

#### REFERENCES

- Briggs J.D. and Leigh J.H. (1989). 'Rare or Threatened Australian Plants'. (Special Publication 14, Aust. Nat. Parks and Wildlife Serv.: Canberra.)  
 Beaglehole A.C. (1988). 'The distribution and conservation of vascular plants in the North East area, Victoria'. (A.C. and H.M. Beaglehole, Portland.)  
 Duncan J.S. (ed) (1982). 'Atlas of Victoria'. (Govt Printer, Melbourne.)